

Date: Fri, 6 May 94 04:30:14 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #133
To: Ham-Ant

Ham-Ant Digest Fri, 6 May 94 Volume 94 : Issue 133

Today's Topics:

2m Amplifier mounted at antenna?
50-ohm Coax For A'Buryin
Close-by antennas (2 msgs)
Close-by antennas (try again)
COMMENTS on the ASA 2m antenna
help-portable 2-7Mhz antenna
Help with ATV antenna tuning, UHF SWR meter advice, general ATV stuff?
Loading the boom on a monobander.
longwire antenna question
Mininec3
Through-the-window on a Saturn

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 5 May 94 07:48:03 MST
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!udel!pacs.sunbelt.net!
lynx.unm.edu!dns1.NMSU.Edu!dns1.NMSU.Edu!usenet@network.ucsd.edu
Subject: 2m Amplifier mounted at antenna?
To: ham-ant@ucsd.edu

On 2 May 94 13:23:16,
Val Breault <vbreault@rinhp750.gmr.com> wrote:

>In article <Cp2wHu.13F5@yuma.ACNS.ColoState.EDU> galen@picea.CFNR.ColoState.EDU
(Galen Watts) writes:

>

> I've thought about this for 432, but the problem of getting 12 volts at
> 10-20 amps to the top of the tower stops me. Running 120 VAC up to another
> supply makes for a large tower top box with more wind load.
>
>I haven't tried this, but I've given it some thought.
>
>Use a power supply that has remote sensing capability. You run the power
>and sense lines up to the load. The power supply will adjust it's output
>to achieve 12V at the load point.
>
>During periods of low power consumption (listening), the loss in the power
>lines will be small and the power supply will put out just a tad over 12V,
>but when power demands are high and the I^R loss is high, the power supply
>will compensate by putting out enough to attain 12V at the load.
Intresting idea but one must be very careful of loop bandwidth problems in
the power supply when the modulation is cw or ssb as it is in satellite
work. In this case the load is time varing and if the loop bandwidth of
the power supply is not very wide compared to the modulation you will still
get time varing dc at the amp and it can introduce unwanted modulation of
the amplifier, on the other hand if the loop bandwidth of the power supply
is narrow compared to the modulation then it probably wont fix the low
voltage problem as it will make the voltage averaged over a time of about
2/BW equal to the desired voltage and this will probably get rid of about
half of the drop. A better way I believe is to use a variable power supply
in the shack and with the amplifier in full cw transmit adjust the voltage
at the amplifier to be 13 vdc or so then let it go to 15 or 16 when it is
not transmitting. Frist be certain that 15 or 16 vdc wont hurt the amp and
that the drop is such that this is as high as it will go, but for #12 or
#10 wire to the amp this is usually the case. Good Luck AA5ZQ Bill

Date: 5 May 94 23:46:46 GMT
From: hp-cv!hp-pcd!hpcvsnz!tomb@hplabs.hpl.hp.com
Subject: 50-ohm Coax For A'Buryin
To: ham-ant@ucsd.edu

Dick Flanagan (flanagan@niagara.Tymnet.COM) wrote:
: There was a recent posting that mentioned a particular type
: of 50-ohm coax that was good to use when it had to be buried
: underground and left there. Something about it having a special
: jacket that resisted moisture and other ground contaminants.

: Unfortunately, I have searched back through our News archives
: and I can't locate it. Does anyone remember the manufacturer
: or model number of this coax?

Belden's catalog lists several coaxial cables for direct

burial. The distinction they seem to share is that they all have a polyethelene jacket instead of the more usual PVC jacket. I've had reasonable luck just burying a length of polyethelene pipe (comes cheap in 100 foot rolls at home/building centers, for sprinkler systems) and using it as a conduit for coax. You gotta be careful to either keep it all sloped one way with the low end free, or provide a good drain at any low point(s), or keep water from getting in in the first place (which can be very difficult). Things can also get tough if you want to go over 100 feet, because the normal couplers fit inside the pipe and reduce its inside diameter. The discontinuity also makes it much harder to shove coax thru. But up to 100 feet, it works great.

73, K7ITM

Date: 5 May 1994 15:09:20 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!news.duke.edu!zombie.ncsc.mil!
cs.umd.edu!newsfeed.gsfc.nasa.gov!usenet@network.ucsd.edu
Subject: Close-by antennas
To: ham-ant@ucsd.edu

Date: 5 May 1994 15:41:50 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.duke.edu!eff!news.umbc.edu!
cs.umd.edu!newsfeed.gsfc.nasa.gov!usenet@network.ucsd.edu
Subject: Close-by antennas
To: ham-ant@ucsd.edu

In article <2qb270\$olp@paperboy.gsfc.nasa.gov> kirk@neptune.gsfc.nasa.gov (Robert Kirk) writes:
>

Date: 5 May 1994 15:49:07 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!news.duke.edu!eff!news.umbc.edu!
cs.umd.edu!newsfeed.gsfc.nasa.gov!usenet@network.ucsd.edu
Subject: Close-by antennas (try again)
To: ham-ant@ucsd.edu

I now use a Larson dual band (2m/440) thru-glass antenna on the back window of my car. The car is full size, steel roof, sedan.

If I get a cellular phone, can I put the usual thru-glass cell antenna next to the Larson? Any propagation problems by having the two antennas a few inches apart, always assuming I don't transmit on both rigs at once, of course?

Bob Kirk
N3OZB

Date: Mon, 2 May 1994 19:23:17 GMT
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!darwin.sura.net!
hearst.acc.Virginia.EDU!saips.cv.nrao.edu!sadirra.gb.nrao.edu!
dgordon@network.ucsd.edu
Subject: COMMENTS on the ASA 2m antenna
To: ham-ant@ucsd.edu

What were the comments (pro/cons) on the ASA 2m base antenna? Could you re-post them and or email them to me? Thanks...

David - KB4LCI
dgordon@nrao.edu

Date: 5 May 1994 09:15:17 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!olivea!
inews.intel.com!ilx018.iil.intel.com!ilx049.iil.intel.com!dbraun@network.ucsd.edu
Subject: help-portable 2-7Mhz antenna
To: ham-ant@ucsd.edu

In article <Cotp2z.E5G@vectorbd.com>, jp11@vectorbd.com (Jim Lill) writes:
|> Donald E Rickerson (drickers@mason1.gmu.edu) wrote:
|> : I am looking for a portable, horizonally polarized, antenna for a HF-ALE

So what's this "ALE" you are all talking about???

Doug Braun (4X/N10WU)

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Snail Mail: US: Other:
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Mendham, NJ 07945

IDC-42

Matam Scientific Center

Haifa, Israel 31015

Date: Wed, 4 May 1994 13:55:18 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!EU.net!sunic!psinnntp!psinnntp!
arrl.org!zlau@network.ucsd.edu

Subject: Help with ATV antenna tuning, UHF SWR meter advice, general ATV stuff?

To: ham-ant@ucsd.edu

F. Kevin Feeney WB2EMS (fkf1@cornell.edu) wrote:

: In article <jefman-270494230322@pme15.pomo.wis.net> Jeff Mann,

: Hi Jeff,

: I've been using quagis on ATV and other stuff for several years now with
: good results. I suspect that the bandwidth of a quagi, though better than
: a straight yagi, is still a bit narrow for a full atv signal, but it
: seems to
: work. I get a low swr for about 3-4 mhz bandwidth typically.

True, if you try to optimize a yagi one element at a time, you do
tend to get a narrow bandwidth. But, it is possible to do much
better with very long yagis. The 1992 Eastern States Conference
has a design by Tom Kirby that has plenty of bandwidth for ATV,
even at 135 cm (I realize the band isn't big enough). From 220 to
226 MHz its gain is from 18.4 to 18.7 dBi, while the SWR is below
1.4 to 1. However, even on 70 cm, 25 elements on a 17 ft boom may
be a little too big for some applications. The 22 element K1FO
yagi for 432 also has a pretty wide bandwidth.

--

Zack Lau KH6CP/1

2 way QRP WAS

8 States on 10 GHz

Internet: zlau@arrl.org 10 grids on 2304 MHz

Date: 6 May 94 05:11:57 GMT

From: news-mail-gateway@ucsd.edu

Subject: Loading the boom on a monobander.

To: ham-ant@ucsd.edu

I will be replacing my a3 tribander with a full size 20 meter monobander
on a 20 foot boom shortly in my efforts to maximize my qrp contest signal
over the next several years. I read in the NCJ several years ago a

reference to loading the boom of a 20 meter yagi for 40 meters. In theory it should work on several bands as a rotatable dipole. Does anyone have any experience with this? Does one isolate the boom from tower? Could the boom be fed with ladder line? Practical suggestions/experience appreciated!

*****-----

Dr. Rick Zabrodski BSc, MD, CCFP(E) * VE6GK "glider king"
EMAIL: zabrodsk@med.ucalgary.ca * "M.D. on weekdays"
Packet: VE6GK@VE6YYC.#cgy.ab.can.na * "Solar powered aviator"
Phone: (403) 271-5123 Fax: 225-1276 * on weekends!"

Date: 5 May 94 14:28:32 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!noc.near.net!news.delphi.com!
BIX.com!hamilton@network.ucsd.edu
Subject: longwire antenna question
To: ham-ant@ucsd.edu

SYJERRY@duq3.cc.duq.edu (Sy Jerry) writes:

>is a longwire antenna solid wire or stranded wire ? do I strip the
>insulation ? what gauge of wire to use (for tx and for rx) ?

Virtually anything will work -- for a while. The problem is find something that won't have you back up on the ladder fixing it all the time.

Stranded wire is better than solid. Solid tends to stretch and break more easily.

The best is what's called Copperweld or Copper-Clad, which has individual strands made of steel that have been copper plated. You get the strength of steel + the electrical characteristics (think of the skin effect) of copper. The only disadvantage is that it's a stiffer wire and a bit harder to work with. Places like Radio Works (ph 804-484-0140) sell it in #14 gauge for 9 cents/foot. If you have a very long (> 150') run or anticipate problems with ice, you might consider #12 gauge at 14 cents/foot.

If you like the idea of a copper-clad wire but would like something easier to work with and less likely to kink, look for a wire with

a larger number of smaller strands. To go from the usual 7 strands of #22 in a #14 wire to 19 strands of something smaller adds about a penny/foot.

Another good choice is hard-drawn stranded copper wire. The copper's been hardened somehow (sorry, I'm no metalurgist :-)) so it won't stretch as much. Figure this at a penny/foot less than copper-clad.

Most folks (to the best of my knowledge) use bare wire simply because that's mostly what you see offered. The ARRL antenna book does advise, however, that an enamel coating is preferable because the coating resists oxidation and corrosion. You might also choose insulated wire for the same reason, particularly if you live in an acid rain area. Another reason to use a jacketed wire is if you intend to stretch it thru trees; the jacket may help protect it somewhat (maybe not a lot) against rubbing against branches.

Hope this helps.

Regards,

Doug Hamilton KD1UJ hamilton@bix.com Ph 508-358-5715
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117, USA

Date: 5 May 94 18:19:26 GMT
From: news-mail-gateway@ucsd.edu
Subject: Mininec3
To: ham-ant@ucsd.edu

Hi to all,

Is the mininec3 _manual_ available at any FTP sites? Please post site address if you know it, Thanks in advance.

73 Mark KA3LFG

Date: 5 May 1994 09:13:13 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!olivea!
inews.intel.com!ilx018.iil.intel.com!ilx049.iil.intel.com!dbraun@network.ucsd.edu
Subject: Through-the-window on a Saturn
To: ham-ant@ucsd.edu

In article <2pjnao\$7fe@xap.xyplex.com>, sas@opus.xyplex.com (Scott Sminkey -

Sustaining Eng Group) writes:

|>
|> Where do people get the idea that a properly done drilled mount causes any
|> devaluation in the price of a car?

....
|> I'll ask my usual question: can anyone cite even one single case where a
|> properly done drilled mount resulted in devaluation?

Yes, but can anyone cite even one single case where they have
actually SOLD a car with a antenna hole in it? That's the more
relevant question.

Doug Braun (4X/N10WU)

Email: dbraun@inside.intel.com
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Date: 5 May 1994 12:51:35 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!math.ohio-state.edu!magnus.acs.ohio-
state.edu!peri.acs.ohio-state.edu!rdixon@network.ucsd.edu
To: ham-ant@ucsd.edu

References <CoMoL6.2F6y@austin.ibm.com>, <2pjnao\$7fe@xap.xyplex.com>,
<2qadb9INN1ful@ilx018.iil.intel.com>t
Reply-To : Bob_Dixon@osu.edu
Subject : Re: Through-the-window on a Saturn

In article <2qadb9INN1ful@ilx018.iil.intel.com>, dbraun@ilx049.iil.intel.com (Doug
Braun) writes:

|>
|> Yes, but can anyone cite even one single case where they have
|> actually SOLD a car with a antenna hole in it? That's the more
|> relevant question.
|>

Yes, I sold my Dodge station wagon several years ago, with a hole in the center of

the roof where my ball mount had been installed. I plugged the hole with silicon caulk.

It was not really noticeable unless you stood on tiptoes and looked at the roof. The guy who bought the car looked at the hole, felt the plug with his hand, and seemed unconcerned about it and never mentioned it.

Bob W8ERD

Date: Fri, 6 May 1994 00:46:42 GMT
From: ihnp4.ucsd.edu!swrinde!emory!cs.utk.edu!stc06r.CTD.ORNL.GOV!fnnews.fnal.gov!
att-in!cbnewsm!jeffj@network.ucsd.edu
To: ham-ant@ucsd.edu

References <gganderson.354.0@augustana.edu>, <CozBpI.Crn@fore.com>,
<1994May5.172356.14014@kocrsv01.delcoelect.com>newsm
Subject : Re: kites <--> antennas ?

In article <1994May5.172356.14014@kocrsv01.delcoelect.com>
jcbach@kocrsv01.delcoelect.com (James C. Bach) writes:

>
>In article <CozBpI.Crn@fore.com>, ed@fore.com (Ed Bathgate) writes:
>> >I was out on Sunday flying a few small kites with my
>> >family. With us were some experienced kite flyers,
>> >who were flying (among other things) a very stable
>> >kite with a windsock tail that seemed handled the variable
>> >winds quite magnificantly. It got me thinking....
>>
>> >Anyone on this list with experience using kites to loft
>> >antennas? I would like to hear your experiences.
>> Not me personally, but somebody else told me they fried a receiver using
>> a kite lifted wire antenna. Suspected static charge blew front end of radio.
>> I think that a grounded coil might be a good way to feed antenna without
>> getting into the Ben Franklin syndrome.
>
>I haven't personally done it yet either, but I plan to this summer . . .
>I've heard of other people using "RF Chokes" (coils to ground) to bleed-off
>the static charge . . . but I wonder "Why go to THAT much bother?" . . .
>seems that a 100K resistor would work more than well enough (most of the
>anti-static wrist-straps for lab/bench use are like 100K to 1M) to bleed-off
>the static, yet wouldn't dissipate ANY RF power from the rig.

I remember reading about some hams whos used a small neon bulb to bleed off the static. They said it was really interesting to watch when a storm went over them. 8-)

Jeff

--

Jeff Jones AB6MB | Vote out those who voted for the North American
jeffj@seeker.mystic.com | Free Trade Agreement!
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End of Ham-Ant Digest V94 #133
